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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/038,163

01/02/2002

Mario Blaum

TUC920010036US1

7818

46917

7590

09/20/2005

KONRAD RAYNES & VICTOR, LLP.

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EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,163

Applicant(s)

BLAUM ET AL.

Examiner

YOUNG T. TSE

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 042203,012004,060104.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the numeral "6" of the read formatter shown in Figure 1 should be labeled as "36" as mentioned in paragraph [0016], line 15. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: the reference sign "26" shown in Figure 1 is not mentioned in the

specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: paragraphs [0001] and [0030], the copending applications need to be updated including the filing date; paragraph [0013], line 7, the word "and" should be deleted; paragraph [0015], lines 6 and 14, "host 2" and "converts convert" should be "tape drive 4" and "converts", respectively; paragraphs [0018] and [0037], "the tape medium 8" is not understood; paragraph [0020], line 1, "2" should be "22"; paragraph [0022], line 6, "PLL 20", is not understood; paragraph [0023], line 9, "decoder 40" is not understood and line 11, "68" should be "61"; paragraph [0026], line 4, paragraph [0028], line 11, and paragraph [0030], line 1, "PLL" should be "RLL". Appropriate correction is required.

Claim Objections

4. Claims 1-38 are objected to because of the following informalities:

In claim 1, line 3, "a binary" should be "the binary", line 5, "the data stream" should be "the binary data stream", line 6, "a encoded" should be "an encoded", and line 6, "data" should be "data stream". Also see claims 13 and 27.

In claim 3, line 2, " "10." " should be "10.". Also see claims 15 and 29.

In claim 5, line 3, "further" should be "stream". Also see claims 17 and 31.

In claim 6, line 5, "binary data" should be "data stream". Also see claims 18 and 32.

In claim 8, line 2, "data" should be "data stream". Also see claims 20 and 34.

In claim 10, lines 1 and 3, "at an" and "binary data" should be "at the" and "data stream", respectively. Also see claims 22 and 36.

In claim 25, line 2, "a Input/Output" should be "an Input/Output (I/O) device".

Wherein claims 2, 4, 7, 11-12, 14, 16, 19, 23-24, 26, 28, 30, 33, and 37-38 depend upon claims 1, 13 and 27.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 3-5, 8-11, 15-17, 20-23, 29-31 and 34-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3, 8, 15, 20, 29 and 34, "VFO" and "m/n" are undefined.

In claims 8-11, Applicants are requested to use a consistent term for the rate.

Also see claims 20-23 and 34-37.

In claim 11 (lines 2-3), claim 23 (lines 2-3) and claim 37 (lines 2-3), the phrase "the m/n rate encoded bit sequence" lacks antecedent basis.

Wherein dependent claims 4-5, 16-17 and 30-31 depend upon claims 3, 15 and 29.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Blaum et al..

Blaum et al. (US patent 5,999,110) clearly discloses a block diagram of a tape driver in Figure 2 corresponding to Figure 1 of the instant application.

Figure 3 shows a diagrammatic illustration of the recording or channel format of encoded data sets employing the synchronization patent corresponding to Figure 2 of the instant application.

Figures 4 and 5 are tables representing the Hamming characteristics of the synchronization pattern with respect to a concatenated VFO pattern of Figure 3.

With respect to claims 1, 13 and 27, the block elements of Figure 2 clearly correspond to the claimed subject matter of the apparatus and method claims. For example, the write formatter 45 receives a binary data stream; the sync generator 46 generates a synchronization mark having at least one isolated peak into at least one point in the data stream; the RLL encoder forms an encoded data stream by concatenating the synchronization mark with the received binary data; and the sync detector 48 during decoding, detects the synchronization mark based on error propagation occurring adjacent to the at least one isolated peak of the synchronization mark.

The claimed subject matters of claims 2-12, 14-26 and 28-38 are either shown in the tape driver shown in Figure 2 or shown in the channel format of encoded data sets employing the synchronization patent in Figure 3.

Conclusion

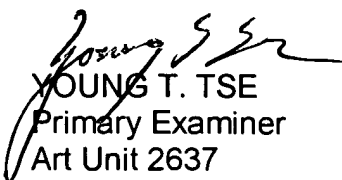
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Katayama et al., Ashley et al., and Shim et al. are related to

apparatus and method for recoding and/or reproducing data recorded in a tape recorder or a record medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


YOUNG T. TSE
Primary Examiner
Art Unit 2637